

Habitats and Adaptations

3-2 The student will demonstrate an understanding of the structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats. (Life Science)

3.2.3 Recall the characteristics of an organism's habitat that allow the organism to survive there.

Taxonomy level: 1.2-A Remember Factual Knowledge

Previous/Future knowledge: In kindergarten (K-2.1), students identified the specific needs of all living things. In 1st grade, students identified needs specific to plants (1-2.1) and explained how the distinct environments support different types of plants (1-2.5). In 2nd grade, students identified needs specific to animals (2-2.1) and explained how the distinct environments support different types of animals (2-2.3). In 5th grade (5-2.2), students will develop a more in-depth understanding of the abiotic factors in an ecosystem and will explain how limiting factors affect populations.

It is essential for students to know that organisms have needs for survival that are found in their particular habitats. Organisms can only survive in an area where its basic needs (air, food, water, shelter or space, and light) can be met.

A habitat offers a range of conditions, for example water, air, food, shelter or space, or sunlight, which allow some organisms to live there. The specific characteristics of the habitat that allow the needs of energy, growth, and protection to be met are dependent upon the particular plant or animal.

- The habitat for some animals and plants may cover a large area. Some examples may be:
 - grazing animals may need lots of area to get enough food,
 - birds fly from place to place to get food, or
 - large trees will grow in areas where enough water is available for their growth.
- Other animals or plants have habitats that may be a small part of a larger environment. Some examples may be:
 - squirrels may make their nests in one tree in a forest,
 - some small insects may live under a fallen log in the forest;
 - orchid flowers live by hanging on trees found only in warm, wet areas, or
 - water lilies live in ponds in the shallow water.

It is not essential for students to know features about specific biomes.

Assessment Guidelines:

The objective of this indicator is to *recall* characteristics of a habitat that allow an organism to survive there; therefore, the primary focus of assessment should be to recognize that organisms could only survive in a habitat where their needs can be met. However, appropriate assessments should also require student to *identify* habitats that are appropriate for some common plants and animals; or *recognize* when a habitat is not appropriate for some common plants and animals.